

STANDARD REFERENCE:

EN 10088-3: 2014 (Hot-rolled and bright products)

RODACCIAI REFERENCES AND COMPARABLE STANDARDS

| EUROPE | | ITALY | GERMANY | | FRANCE | UK | USA |
|------------------|--------|----------------|------------------|--------|------------------|-------------------|------|
| EN 10088-3: 2005 | | (UNI 6900: 71) | (DIN 17440 - 85) | | (NF A 35-574-90) | (BS 970 pt.3 -91) | AISI |
| Grade | N° | | Werkstoff | N° | | | |
| X6CrMoS17 | 1.4105 | X 10 CrS 17 | X6CrMoS17 | 1.4105 | Z 8 CF 17 | - | 430F |

CHEMICAL COMPOSITION (CAST ANALYSIS) (%)

| C / max | Si / max | Mn / max | P / max | S | Cr | Mo |
|---------|----------|----------|---------|-----------|-----------|-----------|
| 0,08 | 1,50 | 1,50 | 0,040 | 0,15÷0,35 | 16,0÷18,0 | 0,20÷0,60 |

MECHANICAL PROPERTIES - Rough turned (1X) in the annealed condition

| Size max (mm) | Hardness HB max* | Rp _{0,2} (MPa) min | R _m (MPa) | A ₅ (%) min | Resistance to intergranular corrosion | |
|---------------|------------------|-----------------------------|----------------------|------------------------|---------------------------------------|-------------------------|
| | | | | | in the delivery condition | in the welded condition |
| 100 | 200 | 250 | 430÷630 | 20 | NO | NO |

* Only for guidance

MECHANICAL PROPERTIES - Cold drawn (2H, 2B) and ground bars (2G) in the solution annealed condition

| Size max (mm) | Rp _{0,2} (MPa) min | R _m (MPa) | A ₅ (%) min* |
|---------------|-----------------------------|----------------------|-------------------------|
| ≤ 10 | 330 | 530÷780 | 7 |
| > 10 ≤ 16 | 310 | 500÷780 | 7 |
| > 16 ≤ 40 | 250 | 430÷730 | 12 |
| > 40 ≤ 63 | 250 | 430÷730 | 12 |
| > 63 ≤ 100 | 250 | 430÷630 | 20 |

* Values valid only for size ≥ 5 mm

MECHANICAL PROPERTIES - Cold drawn wire and coils (2H)

| Tensile strength levels | +C 500 | +C 650 | +C 800 | +C900 |
|-------------------------|---------|---------|----------|----------|
| R _m (MPa) | 500÷700 | 650÷850 | 800÷1000 | 900÷1100 |

Note: the desired tensile strength level shall be evaluated depending on diameter required

MECHANICAL PROPERTIES - Cold drawn wire and coils in the solution annealed condition (2D)

| Size | 0,10 ≤ d ≤ 0,20 | 0,20 ≤ d ≤ 0,50 | 0,50 ≤ d ≤ 1,00 | 1,00 ≤ d ≤ 3,00 | 3,00 ≤ d ≤ 5,00 | 5,00 ≤ d ≤ 16,00 |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| R _m (MPa) max | 900 | 850 | 850 | 800 | 750 | 700 |
| A (%) min | 10 | 15 | 15 | 15 | 15 | 20 |

 Note: If skin passed, R_m might be increased by up to 50 MPa

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STAINLESS STEELS
 FERRITIC

1.4105


WORKING TEMPERATURES RECOMMENDED

| Operation | Hot forgings deformation | Annealing (air) |
|-----------|--------------------------|-----------------|
| °C | 800÷1100 | 750÷850 |

